

Little, Shauna

From: Bandrowicz, Toni
Sent: Wednesday, March 25, 2020 7:15 AM
To: Little, Shauna
Cc: Houlihan, Damien; Cassondra Britton
Subject: RE: Major Storm Control Measures

Thanks, Shauna. I'm curious, do you know if the city has any climate change resiliency requirements that the facility is subject to? I recall that the city had a robust resiliency plan, but really don't know much about it.

Talk to you later this morning.

Tonia Bandrowicz
Senior Enforcement Counsel
Enforcement and Compliance Assurance Division
New England Office of the
U.S. Environmental Protection Agency
5 Post Office Square
Suite 100 (Mail Code 04-3)
Boston, MA 02109-3912
(617) 918-1734

From: Little, Shauna <Little.Shauna@epa.gov>
Sent: Tuesday, March 24, 2020 2:01 PM
To: Bandrowicz, Toni <bandrowicz.toni@epa.gov>
Cc: Houlihan, Damien <houlihan.damien@epa.gov>
Subject: Major Storm Control Measures

Hi Toni,

In advance of our Irving draft permit discussion, **Ex. 5 - Att'y-Client; Delib. Process**

[REDACTED] I am
copying the MSGP permit language below for you to review:

- 2.1.1.8 Implementing structural improvements, enhanced pollution prevention measures, and other mitigation measures, to minimize impacts from stormwater discharges from major storm events that cause extreme flooding conditions, such as the following:
- a. Reinforce materials storage structures to withstand flooding and additional exertion of force;
 - b. Prevent floating of semi-stationary structures by elevating to the Base Flood Elevation (BFE) 5 level or securing with non-corrosive device;
 - c. When a delivery of materials is expected, and a storm is anticipated within 48 hours, delay delivery until after the storm or store materials as appropriate (refer to emergency procedures);
 - d. Temporarily store materials and waste above the BFE level;
 - e. Temporarily reduce or eliminate outdoor storage;
 - f. Temporarily relocate any mobile vehicles and equipment to upland areas;
 - g. Develop scenario-based emergency procedures for major storms that are complementary to regular stormwater pollution prevention planning and identify emergency contacts for staff and contractors; and

h. Conduct staff training for implementing your emergency procedures at regular intervals.

This provision contains the following footnote:

5 Base Flood Elevation (BFE) is the computed elevation to which floodwater is anticipated to rise during the base flood. BFEs are shown on the Federal Emergency Management Agency's Flood Maps and on the flood profiles, which can be access through <https://msc.fema.gov/portal/search>.

And the following information in a request for comment:

Request for Comment 8: EPA requests comment on whether it is appropriate for the permit to include language similar to the proposed language above that facilities should consider implementing enhanced controls to minimize impacts from stormwater discharges from major storms that cause extreme flooding conditions. EPA requests information on structural improvements, enhanced pollution prevention measures, and other mitigation measures that the permit could require facilities to consider. EPA also requests comment on how the permit might identify facilities that are at the highest risk for stormwater impacts from major storms that cause extreme flooding conditions.

One approach could be to use the Federal Emergency Management Agency's (FEMA) Flood Map Service Center (found at <https://msc.fema.gov/portal/search>) to determine if the facility is in a "Special Flood Hazard Area" or Other Area of Flood Hazard. SFHAs are defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. SFHAs are labeled as Zone A, Zone AO, Zone AH, Zones A1-A30, Zone AE, Zone A99, Zone AR, Zone AR/AE, Zone AR/AO, Zone AR/A1-A30, Zone AR/A, Zone V, Zone VE, and Zones V1-V30. "Other flood hazard areas" (or moderate flood hazard areas) are labeled Zone B or Zone X (shaded) are also shown on the Flood Map and are the areas between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood. The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood, are labeled Zone C or Zone X (unshaded). More information on FEMA flood zones can be found at <https://www.fema.gov/flood-zones>.

Lastly, the SWPPP requirements specifically note a requirement to update the SWPPP relating to this new control measure provision:

Facilities must keep their SWPPP up-to-date throughout their permit coverage, such as making revisions and improvements to their stormwater management program based on new information and experiences with wet weather events, including major storm events and extreme flooding conditions.

Ex. 5 - Att'y-client; Delib. Process



Regards,

Shauna Little
Physical Scientist
Water Division
U.S. EPA Region 1
Phone: (617) 918-1989